## Subchapter A Water Conservation Plans §§288.1-288.7

These sections are promulgated under the Texas Water Code, §5.103, §5.105, and §5.120, which provide the commission with the authority to promulgate rules as necessary to carry out its powers and duties under the Texas Water Code and other laws of the state.

§288.1. Definitions. The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise:

Conservation - Those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses.

Industrial use - The use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, including commercial feedlot operations, commercial fish production, and the development of power by means other than hydroelectric.

Irrigation use - The use of water for the irrigation of crops, trees, and pastureland, including, but not limited to, golf courses and parks which do not receive water through a municipal distribution system.

Irrigation water use efficiency - the percentage of that amount of irrigation water which is beneficially used by agriculture crops or other vegetation relative to the amount of water diverted from the source(s) of supply. Beneficial uses of water for irrigation purposes include but are not limited to evapotranspiration needs for vegetative maintenance and growth and salinity management and leaching requirements associated with irrigation.

Mining use - The use of water for mining processes including hydraulic use, drilling, washing sand and gravel, and oil field repressuring.

Municipal per capita water use - The sum total of water diverted into a water supply system for residential, commercial, and public and institutional uses divided by actual population served.

Municipal use - The use of potable water within or outside a municipality and its environs whether supplied by a person, privately-owned utility, political subdivision, or other entity as well as the use of sewage effluent for certain purposes including the use of treated water for domestic purposes, fighting fires, sprinkling streets, flushing sewers and drains, watering parks and parkways, and recreational purposes, including public and private swimming pools, the use of potable water in industrial and commercial enterprises supplied by a municipal distribution system without special construction to meet its demands, and for the watering of lawns and family gardens.

Pollution - The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

Reuse - The authorized use for one or more beneficial purposes of use of water that remains unconsumed after the water is used for the original purpose of use and before that water is either disposed of or discharged or otherwise allowed to flow into a watercourse, lake or other body of state-owned water.

Water conservation plan - a strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water. A water conservation plan may be a separate document identified as such or may be contained within another water management document(s).

- §288.2. Water Conservation Plans for Municipal Uses by Public Water Suppliers.
- (a) A water conservation plan for municipal water use by public water suppliers shall provide information, where applicable, in response to the following:
  - (1) Minimum requirements. All water conservation plans for municipal uses by public drinking water suppliers shall include the following elements:
    - (A) a utility profile including, but not limited to, information regarding population and customer data, water use data, water supply system data, and wastewater system data;
    - (B) specification of conservation goals including but not limited to municipal per capita water use goals, the basis for the development of such goals, and a timeframe for achieving the specified goals;
    - (C) metering device(s), within an accuracy of plus or minus 5.0% in order to measure and account for the amount of water diverted from the source of supply;
    - (D) a program for universal metering of both customer and public uses of water, for meter testing and repair, and for periodic meter replacement;
    - (E) measures to determine and control unaccounted-for uses of water (for example, periodic visual inspections along distribution lines; annual or monthly audit of the water system to determine illegal connections, abandoned services, etc.);
    - (F) a program of continuing public education and information regarding water conservation:
    - (G) a water rate structure which is not "promotional," i.e., a rate structure which is cost-based and which does not encourage the excessive use of water;
    - (H) a drought management plan including:
      - (i) an education and information program concerning the plan;
      - (ii) notification procedures to identify the initiation and termination of the drought and the corresponding implementation and termination of the drought measures;
      - (iii) trigger conditions signaling the start of any identified drought period; and
      - (iv) drought water-use measures (e.g., curtailment of non-essential water uses and other water use restrictions, etc.) corresponding to each trigger condition;
    - (I) a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin in order to optimize available water supplies; and
    - (J) a means of implementation and enforcement which shall be evidenced by:
      - (i) a copy of the ordinance, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and
      - (ii) a description of the authority by which the water supplier will implement and enforce the conservation plan.
  - (2) Additional content requirements. Water conservation plans for municipal uses by public drinking water suppliers serving a current population of 5000 or more and/or a projected population of 5000 or more within the next ten years subsequent to the effective date of the plan shall include the following elements:

- (A) a program of leak detection, repair and water loss accounting for the water transmission, delivery and distribution system in order to control unaccounted-for uses of water;
- (B) a record management system to record water pumped, water deliveries, water sales and water losses and which allows for the desegregation of water sales and uses into the following user classes:
  - (i) residential.
  - (ii) commercial,
  - (iii) public and institutional, and (iv) industrial: and
- (C) a requirement in every wholesale water supply contract entered into or renewed after official adoption of the plan (by either ordinance, resolution or tariff), and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements in this chapter; if the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with applicable provisions of this chapter.
- (3) Additional conservation strategies. Any combination of the following strategies shall be selected by the water supplier, in addition to the minimum requirements above, if they are necessary to achieve the stated water conservation goals of the plan. The commission may require that any of the following strategies be implemented by the water supplier if the commission determines that the strategy is necessary to achieve the goals of the water conservation plan:
  - (A) conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
  - (B) adoption of ordinances, plumbing codes and/or rules requiring water conserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition;
  - (C) a program for the replacement or retrofit of water conserving plumbing fixtures in existing structures;
  - (D) reuse and/or recycling of wastewater and/or greywater;
  - (E) a program for pressure control and/or reduction in the distribution system and/or for customer connections;
  - (F) a program and/or ordinance(s) for landscape water management;
  - (G) a method for monitoring the effectiveness and efficiency of the water conservation plan; and
  - (H) any other water conservation practice, method or technique which the water supplier shows to be appropriate for achieving the stated goal or goals of the water conservation plan.
- (b) A water conservation plan prepared in accordance with rules of the Texas Water Development Board and substantially meeting the requirements of this section and other applicable commission rules may be submitted to meet application requirements pursuant

to a memorandum of understanding between the commission and the Texas Water Development Board.

§288.3. Water Conservation Plans for Industrial or Mining Use. A water conservation plan for industrial or mining uses of water shall provide information, where applicable, in response to each of the following elements:

- (1) a description of the use of the water in the production process, including how the water is diverted and transported from the source(s) of supply, how the water is utilized in the production process, and the estimated quantity of water consumed in the production process and therefore unavailable for reuse, discharge, or other means of disposal;
- (2) specification of conservation goals, the basis for the development of such goals, and a time frame for achieving the specified goals;
- (3) a description of the device(s) and/or method(s) within an accuracy of plus or minus five percent to be used in order to measure and account for the amount of water diverted from the source of supply;
- (4) leak-detection, repair, and water loss accounting for water transmission, delivery and distribution system;
- (5) application of state-of-the-art equipment and/or process modifications to improve water use efficiency; and
- (6) any other water conservation practice, method or technique which the user shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

## §288.4. Water Conservation Plans for Irrigation Use.

- (a) A water conservation plan for irrigation uses of water shall provide information, where applicable, in response to each of the following subsections.
  - (1) For an individual user:
    - (A) a description of the agricultural production process which shall include, but is not limited to the type of crops and acreage of each crop to be irrigated, monthly irrigation diversions, any seasonal or annual crop rotation and soil types of the land to be irrigated;
    - (B) a description of the irrigation method or system and equipment including pumps, flow rates, plans and/or sketches of the system layout;
    - (C) a description of the device(s) and/or method(s) within an accuracy of plus or minus five percent, to be used in order to measure and account for the amount of water diverted from the source of supply;
    - (D) specification of conservation goals including where appropriate quantitative goals for irrigation water use efficiency and a pollution abatement and prevention plan;
    - (E) water conserving irrigation equipment and application system or method including but not limited to surge irrigation, low pressure sprinkler, drip irrigation, and nonleaking pipe;
    - (F) leak-detection, repair and water-loss control;
    - (G) scheduling the timing and/or measuring the amount of water applied, for example, soil moisture monitoring;

- (H) land improvements for retaining or reducing runoff, and increasing the infiltration of rain and irrigation water including but not limited to land levelling, furrow diking, terracing, and weed control;
- (I) tailwater recovery and reuse; and
- (J) any other water conservation practice, method or technique which the user shows to be appropriate for preventing waste and achieving conservation.
- (2) For a system providing irrigation water to more than one user:
  - (A) a system inventory for the supplier's
    - (i) structural facilities including the supplier's water storage, conveyance and delivery structures;
    - (ii) management practices including the supplier's operating rules and regulations, water pricing policy, and a description of practices and/or devices used to account for water deliveries; and
    - (iii) a user profile including square miles of the service area, the number of customers taking delivery of water by the system, the types of crops, the types of irrigation systems, the types of drainage systems, and total acreage under irrigation, both historical and projected.
- (B) specification of water conservation goals including maximum allowable losses for the storage and distribution system;
- (C) a description of the practice(s) and/or device(s) which will be utilized to measure and account for the amount of water diverted from the source(s) of supply;
- (D) a monitoring and record management program of water deliveries, sales and losses;
- (E) a leak-detection, repair and water loss control program;
- (F) a program to assist customers in the development of on-farm water conservation and pollution prevention plans and/or measures;
- (G) a requirement in every wholesale water supply contract entered into or renewed after official adoption of the plan (by either ordinance, resolution or tariff), and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements in this chapter; if the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with applicable provisions of this chapter;
- (H) official adoption of the water conservation plan and goals, by ordinance, rule, resolution, or tariff, indicating that the plan reflects official policy of the supplier;
- (I) a drought contingency plan providing:
  - (i) an education and information program concerning the plan;
  - (ii) notification procedures to identify the initiation and termination of the drought and the corresponding implementation and termination of the drought measures;
  - (iii) trigger conditions signaling the start of any identified drought period; and
    - (iv) drought water-use measures (e.g., curtailment of non-essential water uses and other water use restrictions, etc.) corresponding to each trigger condition; and

- (J) any other water conservation practice, method or technique which the supplier shows to be appropriate for achieving conservation.
- (b) A water conservation plan prepared in accordance with the rules of the Soil Conservation Service, the State Soil and Water Conservation Board, or other federal or state agency and substantially meeting the requirements of this section and other applicable commission rules may be submitted to meet application requirements pursuant to a memorandum of understanding between the commission and that agency.

§288.5. Water Conservation Plans for Wholesale Water Suppliers. A water conservation plan for a wholesale water supplier shall provide information, where applicable, in response to each of the following paragraphs.

- (1) Minimum requirements. All water conservation plans for wholesale water suppliers shall include the following elements:
  - (A) a description of the wholesaler's service area, including population and customer data, water use data, water supply system data and wastewater data;
  - (B) specification of conservation goals including, where appropriate, target per capita water use goals for the wholesaler's service area, maximum acceptable unaccounted-for water, the basis for the development of said goals, and a timeframe for achieving those goals;
  - (C) a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply;
  - (D) a monitoring and record management program for determining water deliveries, sales, and losses;
  - (E) a program of metering and leak detection and repair for the wholesaler's water storage, delivery and distribution system;
  - (F) a requirement in every wholesale water supply contract entered into or renewed after official adoption of the water conservation plan (by either ordinance, resolution, or tariff) and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of this chapter; if the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with applicable provisions of this chapter;
  - (G) a drought management plan including:
    - (i) an education and information program concerning the plan;
    - (ii) notification procedures to identify the initiation and termination of the drought and the corresponding implementation and termination of the drought measures;
    - (iii) trigger conditions signaling the start of any identified drought period; and
      - (iv) drought water-use measures corresponding to each trigger condition; and

- (H) a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin in order to optimize available water supplies; and
- (I) a means for implementation and enforcement which shall be evidenced by: a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.
- (2) Additional conservation strategies. Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements above, if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies below are necessary in order for the goals of the water conservation plan to be achieved.
  - (A) conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
  - (B) a program to assist customers in the development of conservation pollution prevention and abatement plans;
  - (C) a program for reuse and/or recycling of wastewater and/or greywater; and
  - (D) any other water conservation practice, method or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

§288.6. Water Conservation Plans for Any Other Purpose or Use. A water conservation plan for any other purpose or use not covered above shall provide information where applicable about those practices, techniques, and technologies that will be used to reduce the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water.

§288.7. Plans submitted with a water right application for new or additional state water.

- (a) A water conservation plan submitted with an application for a new or additional appropriation of water must include data and information which:
  - (1) supports the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;
  - (2) evaluates conservation as an alternative to the proposed appropriation; and
  - (3) evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.
- (b) It shall be the burden of proof of the applicant to demonstrate that no feasible alternative to the proposed appropriation exists and that the requested amount of appropriation is necessary and reasonable for the proposed use.